VMEDNET: Internet Access for Health Professionals

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VMedNet (Virginia Medical Information Network) is a web-based resource developed by the University of Virginia to support the information needs of rural health professionals in Virginia.

PLANNING

When VMedNet was first conceived in June 1993, Internet access was not widely available and Internet navigation was difficult since there were no user-friendly graphical interfaces available. Our primary aim was to provide Internet connections to several regional healthcare facilities in Central and Western Virginia thus providing rural healthcare providers with easy access to information resources available at the University of Virginia and other Internet accessible sites. Our initial plan was to directly connect five unaffiliated hospitals to the Internet with routers and 56 KB leased lines operated by the Virginia Education and Research Network, and provide a UNIX-based menu into the UVA system.

EVOLUTION

The rapid evolution of the World Wide Web, associated changes in technology, and the appearance of local Internet service providers enabled us to shift the emphasis of VMedNet from the provision of Internet access to the development of software applications that would be useful to healthcare professionals.

During the fall of 1994, we established a formal web-site <http://vmednet.gen.va.us/> on a SUN computer. The server was purposefully established outside of the UVA computing umbrella to minimize some of the administrative and political obstacles this would cause. Applications were developed in three broad categories: 1) clinical services, 2) continuing health education, and 3) library services. Clinical services provided through VMedNet include forms-driven electronic consultations with selected UVA faculty physicians, access to the Virginia Computerized Children's Immunization Network (VaCCINe), electronic mail services, and access to UseNet Newsgroups. Continuing health education services include a comprehensive listing of continuing education opportunities at the UVA as well as instructions for registration, and access to a variety of on-line multimedia educational materials. Library services include access to the Health Sciences Library's resources as well as the Library's document delivery service. VMedNet also provides links to the National Library of Medicine and its associated databases.

OPERATIONAL REALITIES

Implementation of VMedNet was a slow and challenging process. We grossly underestimated the time it would take to complete the project. Target hospitals were extremely disparate in their states of technical readiness. Some hospitals had well developed local area networks with well established user bases whereas others had no network infrastructure. Numerous political barriers were encountered. While local physicians were generally very receptive to VMedNet, the administrations of many of the hospitals in the region tended to view VMedNet as a competitive threat from the University.

USE

Despite these obstacles, VMedNet has been up and running for nearly two years and use has slowly continued to increase. Since there are no restrictions to accessing the website (although some specific services are limited to UVA preceptors), use has not been limited to healthcare professionals. From January 1995 through April 1996, there were more than 12,800 separate "hits" to the site from more than 1,320 different subdomains, and 49 different countries. Presently we receive approximately ten electronic consultations weekly from around the world.

GOVERNANCE

The transition from committee-directed grant funding to institutional commitment included issues such as governance, technical support, financial resources, and ongoing staff resources.

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